

of the shaft, kidney-shaped, crumpled, with the polypes scattered on the edge and upper surfaces, especially near the edge. *Polypes* small, when contracted leaving very small papillæ on the surface.

SARCOPTILUS GRANDIS.

Shaft very thick at the base, longitudinally striated. Pinnæ 25 on each side, the lower one smallest.

Hab. —? Brit. Mus.

Length 8 inches.—*From the Proceedings of the Zool. Soc. for March 14, 1848.*

Remarkable Instances of Instinct, or Intelligence, in Animals.

By Dr. WARWICK.

When he resided at Durham, the seat of the Earl of Stamford and Warrington, he was walking one evening in the park, and came to a pond, where fish intended for the table were temporarily kept. He took particular notice of a fine pike, of about six pounds weight, which, when it observed him, darted hastily away. In so doing, it struck its head against a tenterhook in a post (of which there were several in the pond, placed to prevent poaching), and, as it afterwards appeared, fractured its skull, and turned the optic nerve on one side. The agony evinced by the animal appeared most horrible. It rushed to the bottom, and, boring its head into the mud, whirled itself round with such velocity that it was almost lost to the sight for a short interval. It then plunged about the pond, and at length threw itself completely out of the water on to the bank. He (the doctor) went and examined it, and found that a very small portion of the brain was protruding from the fracture in the skull. He carefully replaced this, and, with a small silver tooth-pick, raised the indented portion of the skull. The fish remained still for a short time, and he then put it again into the pond. It appeared at first a good deal relieved, but in a few minutes it again darted and plunged about until it threw itself out of the water a second time. A second time Dr. Warwick did what he could to relieve it, and again put it into the water. It continued for several times to throw itself out of the pond, and, with the assistance of the keeper, the doctor at length made a kind of pillow for the fish, which was then left in the pond to its fate. Upon making his appearance at the pond on the following morning, the pike came towards him to the edge of the water, and actually laid its head upon his foot. The doctor thought this most extraordinary, but he examined the fish's skull, and found it going on all right. He then walked backwards and forwards along the edge of the pond for some time, and the fish continued to swim up and down, turning whenever he turned; but being blind on the wounded side of its skull, it always appeared agitated when it had that side towards the bank, as it could not then see its benefactor. On the next day he took some young friends down to see the fish, which came to him as usual, and, at length, he actually taught the pike to come to him at his whistle and feed out of his hands. With other persons it continued

as shy as fish usually are. He (Dr. Warwick) thought this a most remarkable instance of gratitude in a fish for a benefit received; and, as it always came at his whistle, it proved also what he had previously, with other naturalists, disbelieved, that fishes are sensible to sound.

Dr. Warwick next related an anecdote illustrative of extraordinary instinct in the elephant "*Chunee*," which was shot some years ago at Exeter Change, London, in consequence of his having gone mad. This animal would pick up a shilling from the ground with its trunk, and place it in the waistcoat pocket of the person who intentionally dropped it. Upon one occasion Dr. Warwick dropped a shilling purposely out of the animal's reach, and waited the result with some curiosity. The elephant appeared to consider for some time, and then raising its proboscis to nearly a horizontal position, blew violently against the opposite wall; the reverberation of the wind was so forcible that it blew the coin over; and the elephant repeated its blowing until it had got the shilling within its reach; it then picked it up as usual, and deposited it in the doctor's waistcoat pocket.

The President, Dr. Booth, also related an anecdote of this same "*Chunee*." When the first symptoms of madness were evinced, and it was thought necessary to poison him, a strong dose of mineral poison was inserted into an orange and given to the elephant. The animal was fond of oranges, and immediately swallowed it; but the dose was not strong enough—it merely made him sick. It was attempted to give a still stronger dose in the same manner, but the animal would not take it, and would never again swallow an orange without first crushing it on the ground, as if to smell its contents.—*Proc. of the Lit. and Phil. Soc. of Liverpool*, Nov. iv. p. 76.

BRACHYCLADIUM.

King's Cliffe, Dec. 14, 1848.

As the generic name *Brachycladium*, 'Ann. of Nat. Hist.' series 2, vol. ii. p. 382, is pre-occupied, I beg to substitute for it *Brachycarphium*.—M. J. B.

PREVENTION OF BUGS.

To the Editors of the Annals of Natural History.

Dec. 18, 1848.

GENTLEMEN,—In the Magazine for the last two months are letters on the prevention of the bed-bug (*Cimex lectularius*).

I have used Sir William Burnett's Disinfecting Fluid, the solution of the chloride of zinc; it was applied by means of a feather to all the joints and crevices in the bedstead and with complete success. The solution entering the wood rendered it an unfit, and probably a poisonous habitation for the *Cimex*.

The prevention of these animals is of more importance than some may at first suppose it to be; in some severe diseases, the disturbance